

DOCUMENTATION OF SOME FORMAL ASPECTS OF A MEDIEVAL  
VILLAGE, AND THEIR USE IN A DESIGN PROJECTION

by Gail C. Boyajian

B.A. Jackson College, 1970

Submitted in partial fulfillment of  
the requirements for the degree of  
Master of Architecture  
at the

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Signature of Author. . . . Department of Architecture

Certified by . . . . Maurice Smith, Thesis Supervisor  
Professor of Architecture

Accepted by . . . . .



## ABSTRACT

### DOCUMENTATION OF SOME FORMAL ASPECTS OF A MEDIEVAL VILLAGE, AND THEIR USE IN A DESIGN PROJECTION

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Submitted to the Department of Architecture on May 14, 1976  
in Partial fulfillment of the requirements for the  
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The purpose of the thesis was to find in the form of a village which grew over time some generalities and references which could be partially applied to a design process in another situation. One month was spent in Sauve, a medieval village in the south of France, documenting references with two other students, Jean-Pierre Carniaux and George Hauser. The following three months were spent in the partial application of these references to our various programs.

Thesis Supervisor:

Maurice Smith  
Professor of Architecture

(from original thesis proposal: general notes)

We see in Europe small villages, usually tied closely to the form of the land, that have been lived in for hundreds of years. They have grown without a plan, so their organization is expressive of a local tradition and what people themselves needed to make for access, light, public and private spaces. These towns are characterized by their additive nature - the sum of many parts which build up to a complex whole. They express the numbers of people and decisions which made them; no two conditions being exactly similar. By contrast, larger buildings which characterize architectural developments have increasingly tended to be one-dimensional in the kind of use that was expected to take place in them (and in the way they were designed). They are monuments for work, leisure, learning or living in. When the use has changed or required expansion, the buildings have become obsolete.

We could at least be making buildings that could someday be something useful in another situation. To begin with, we could look at specific forms and dimensions that make places generally habitable. If dimensions are related to a range of possible uses and degrees of privacy instead of maximums, it will be easier to make smaller local decisions which will fit into the existing landscape (natural or built) as well as being easier to add to.

Architects have begun to observe vernacular buildings as a source of terms; the different scales of organization and the permanence and adaptability of parts, but the applications are still very diagrammatic. In order to understand the parts, the parts and whole must be considered together.

This thesis attempts to use a partial application of some references at different scales to a site in twentieth century technology and culture.

2.

Intentions... from an exploration of high density, low rise housing\*

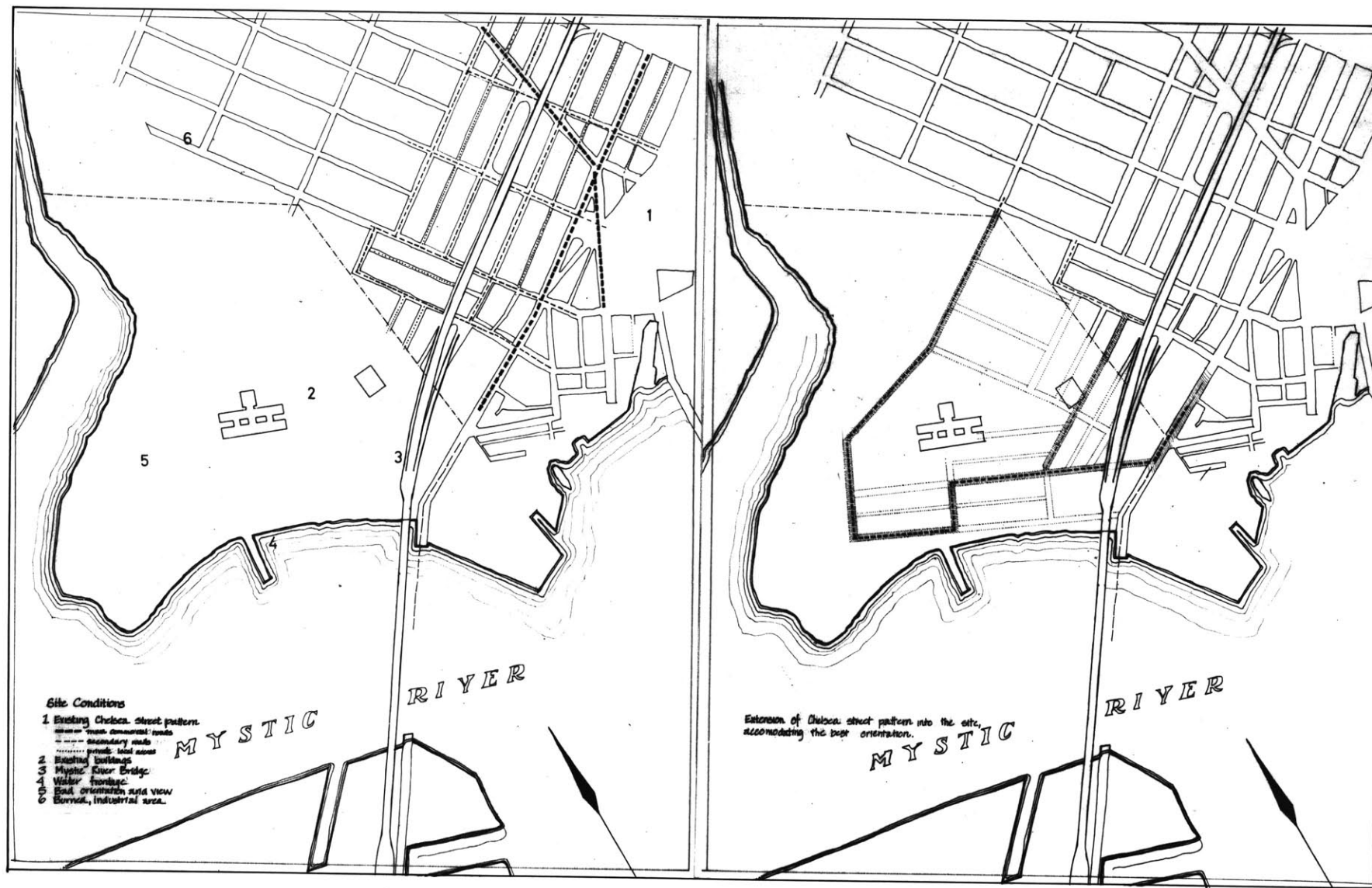
To provide a habitable framework that is closely related to the form of the land, the sun, and the existing streets.

- ~ The building system should be simple, easy to comprehend, and therefore easy to change.
- ~ Density of building should be concentrated, to leave most of the site open for recreation and green space
- ~ The decisions should be made partially and additively; in a way as similar as possible to how they would have been made by people making local decisions within an organizational framework.
- ~ All the buildings would be walk-up, but this could mean entering at a middle level and walking down.
- ~ Parking should generally occur in small clusters; cars shouldn't necessarily be able to go everywhere, but where they do go should also be usable by pedestrians.

The site is the Naval Hospital site in Chelsea, Mass, consisting of 88 acres.

- ~ The site is extremely steep, so movement up and down the slope by cars is difficult. For the most part, main movement would be along the contours of the land.
- ~ Development would be concentrated on the south-facing slope, leaving the rest of the site for recreation and open space.
- ~ As much as possible, connections would be made with existing streets.

\* LB. Anderson studio, fall 1975



REFERENCES.... for a description of Sauve, see  
J.P. Carniaux thesis, June 1976

## Illustrations

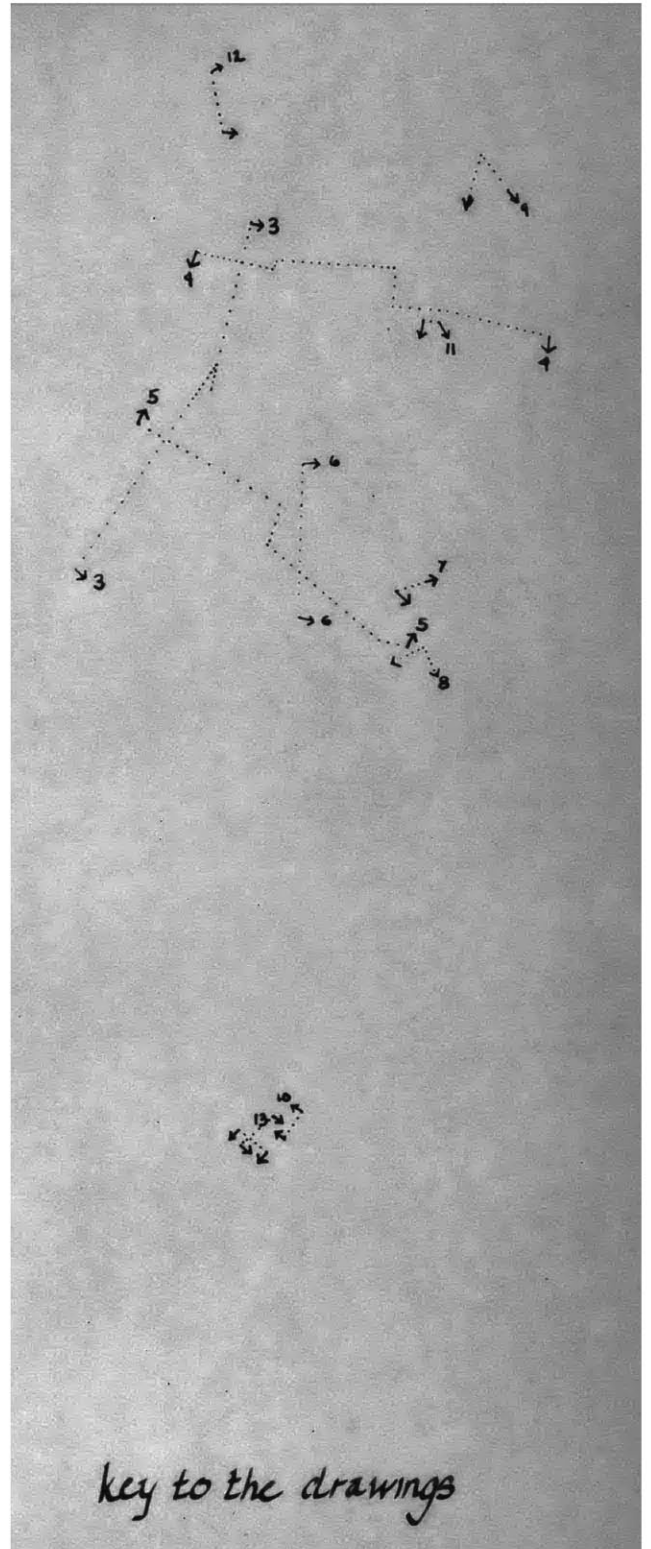
1. aerial photograph of Sauve
2. Village map of Sauve, keyed to the drawings
3. the elevation of the village, built up from the river making a wall
4. Section showing the relationship of the buildings to the hill; places where the buildings have fallen down lets light and landscape into the village.
5. section through the wall and Place de l'Eglise
6. elevation of Place de l'Eglise; the arches which are the building method are here left open to provide an arcade and public way through, which is an extension of the Grand Rue; the main street of the village.
7. street/walkway which goes directly up the hill ← (similar to those in ref #4)
8. small open space, happening at a complex intersection ← of directions
9. view along path at top of village, showing ruins above and landscape beginning to penetrate village (from top of Section, ref #4.)
- 10 } smaller scale along minor streets, more intrusions
- 11 } into the public distribution than along a major way.
12. vaults which build the village up from the river
13. elevation, showing varying roof heights.
- 14 } details of doors and windows, showing the layers
- 15 } of moveable parts
- 16 }
17. circular stair (from building shown in ref. #8)
18. details of the roof tiles. (courtesy of O. Rabaud)

the less important direction is indicated by an arch overhead.



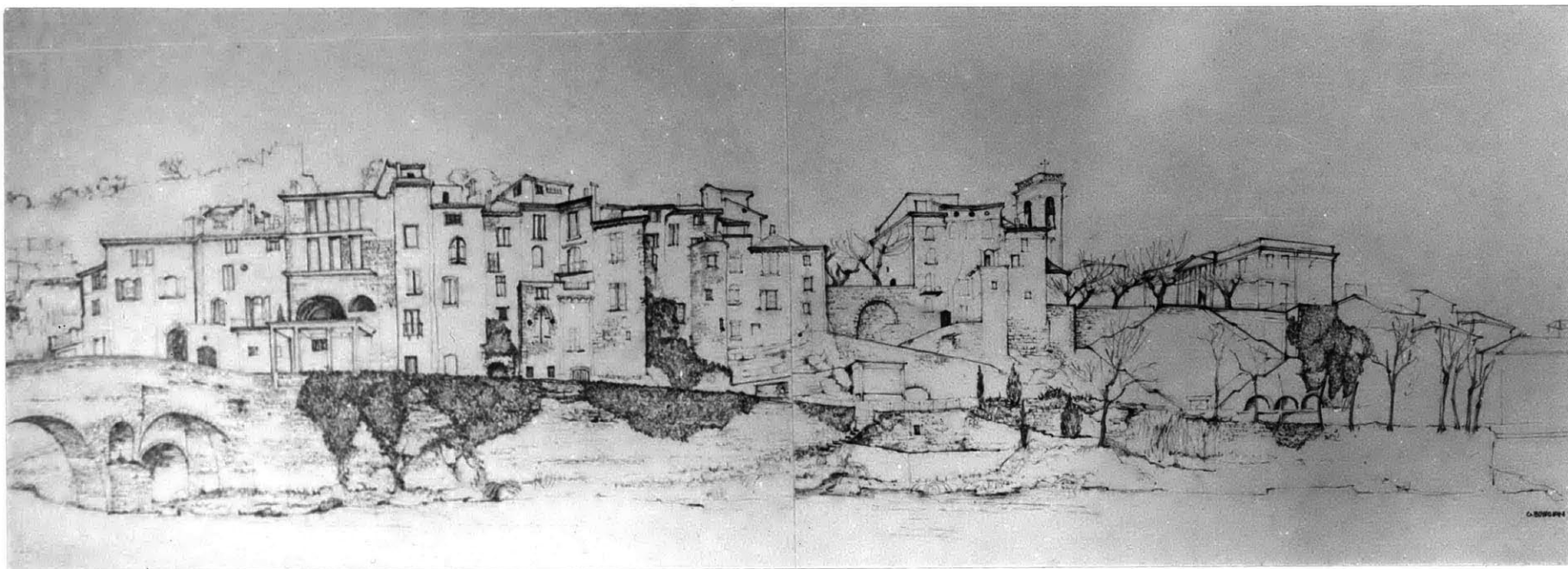
aerial photograph of Sauve,  
showing relationship of village to  
the plateau and the river





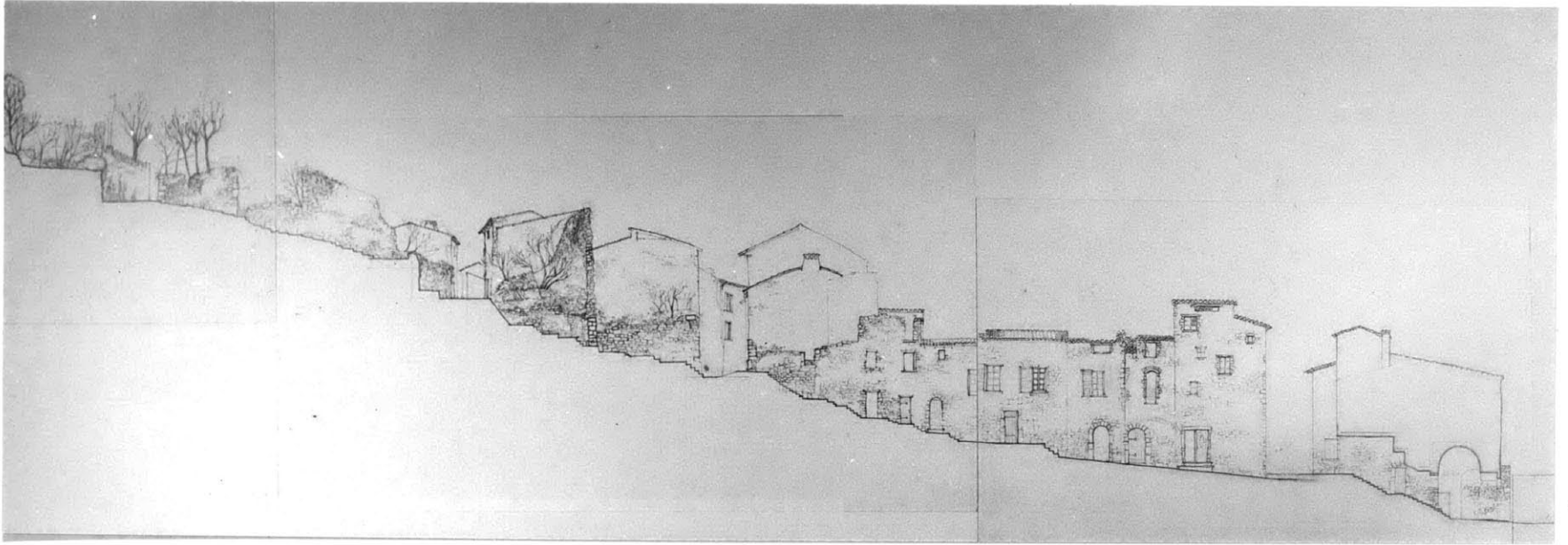




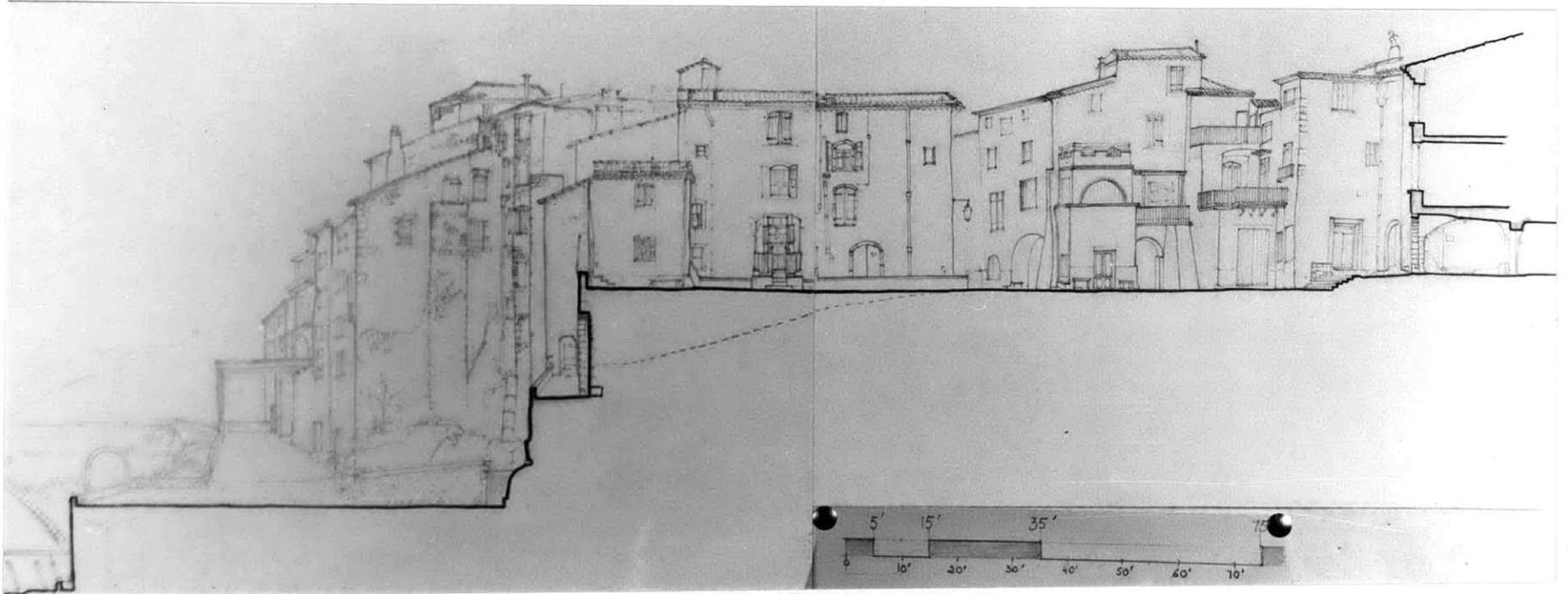


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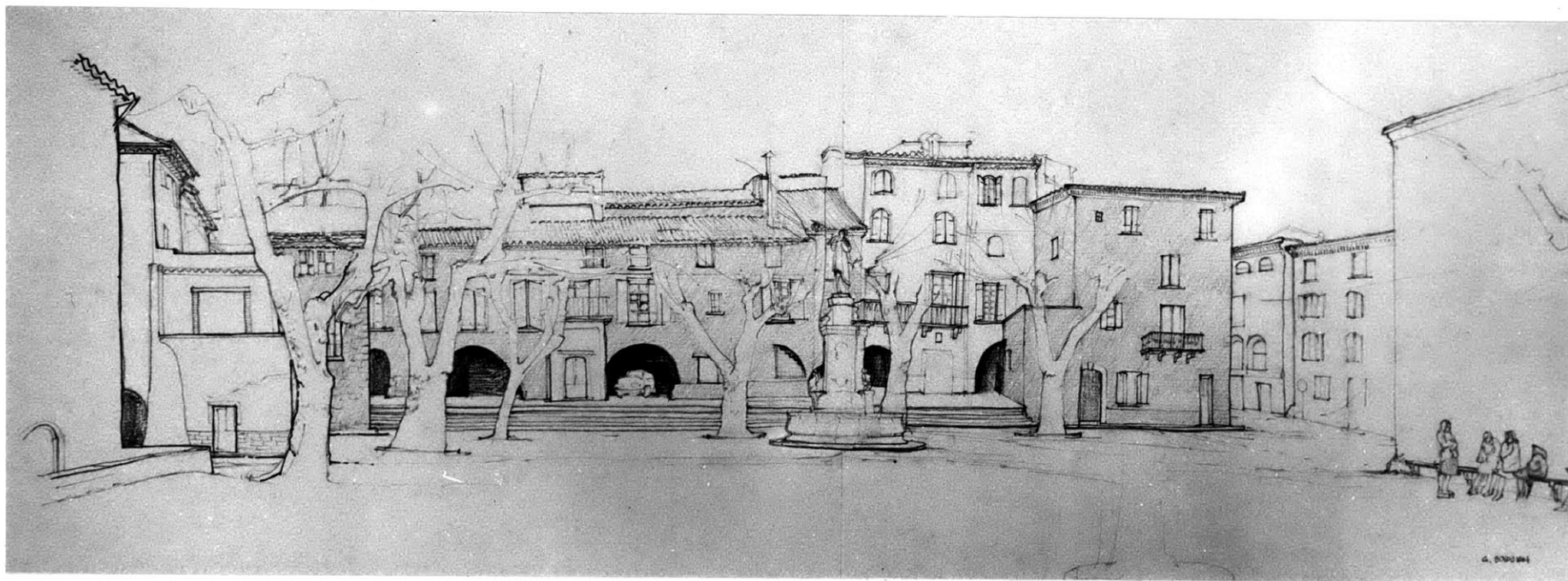
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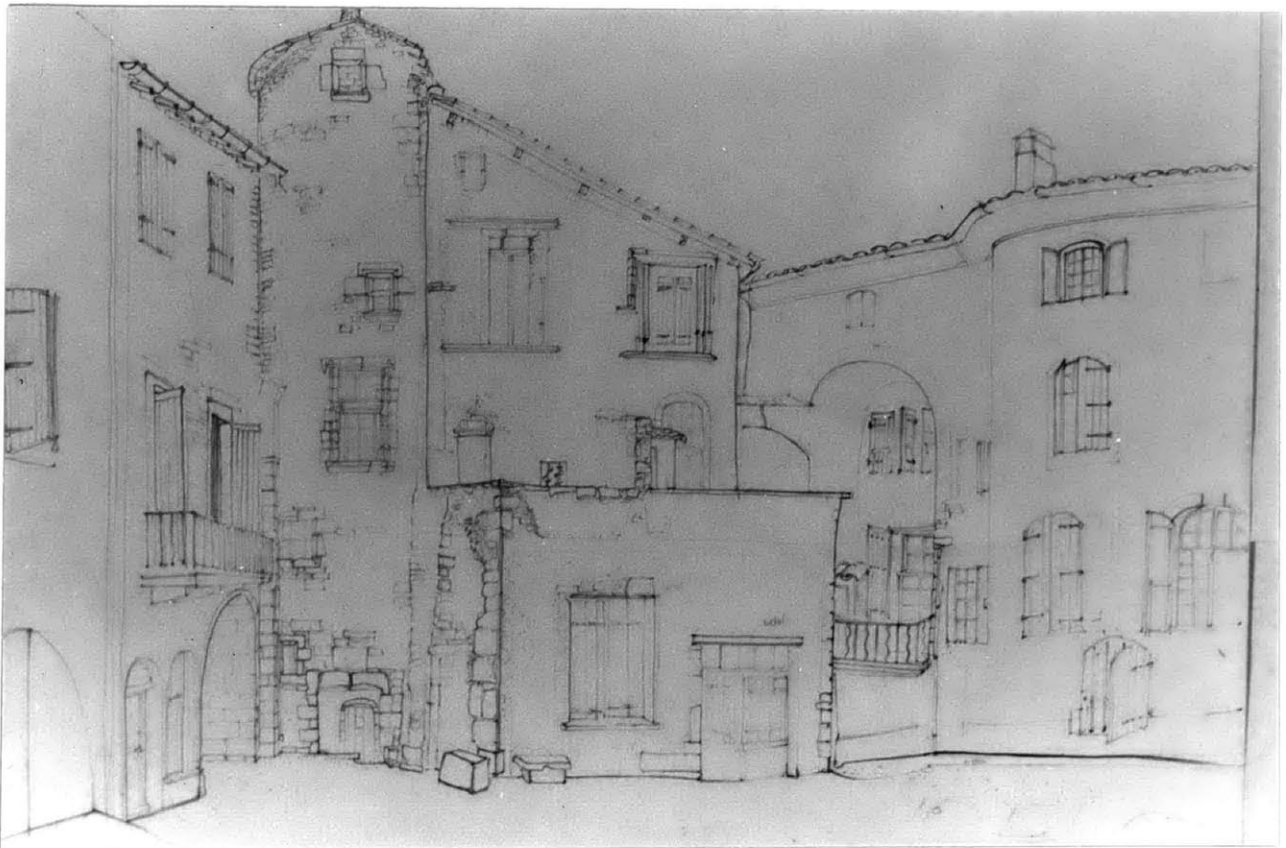
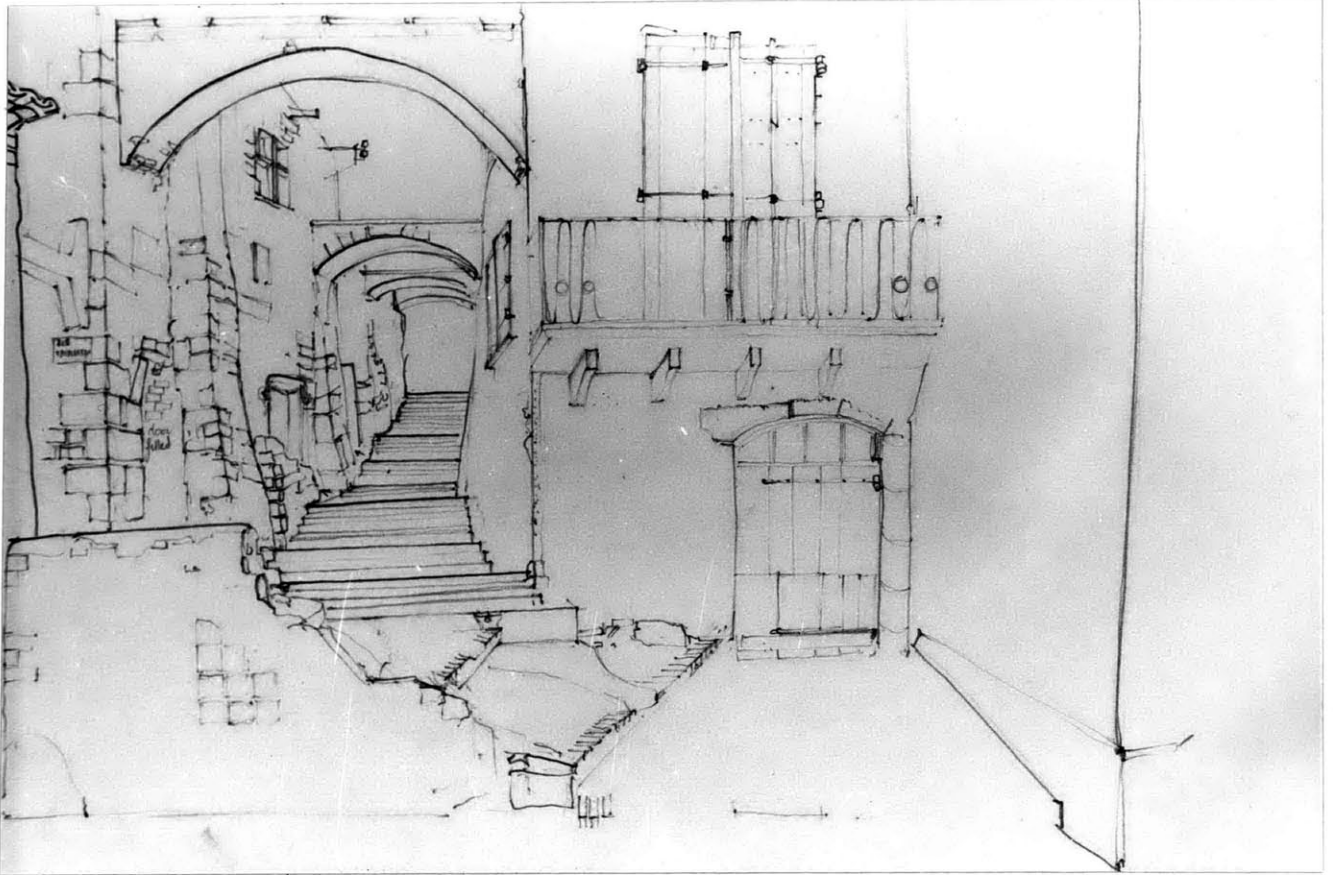
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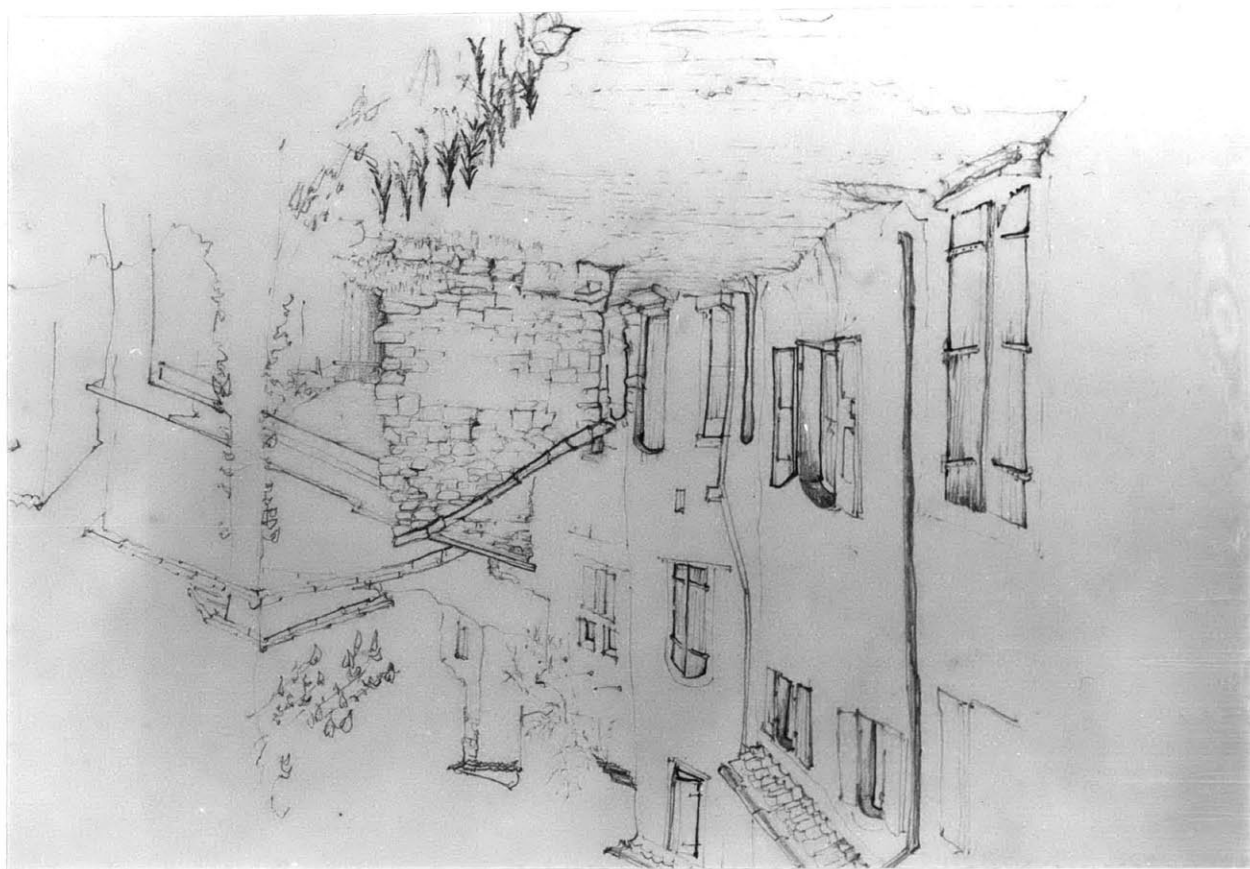




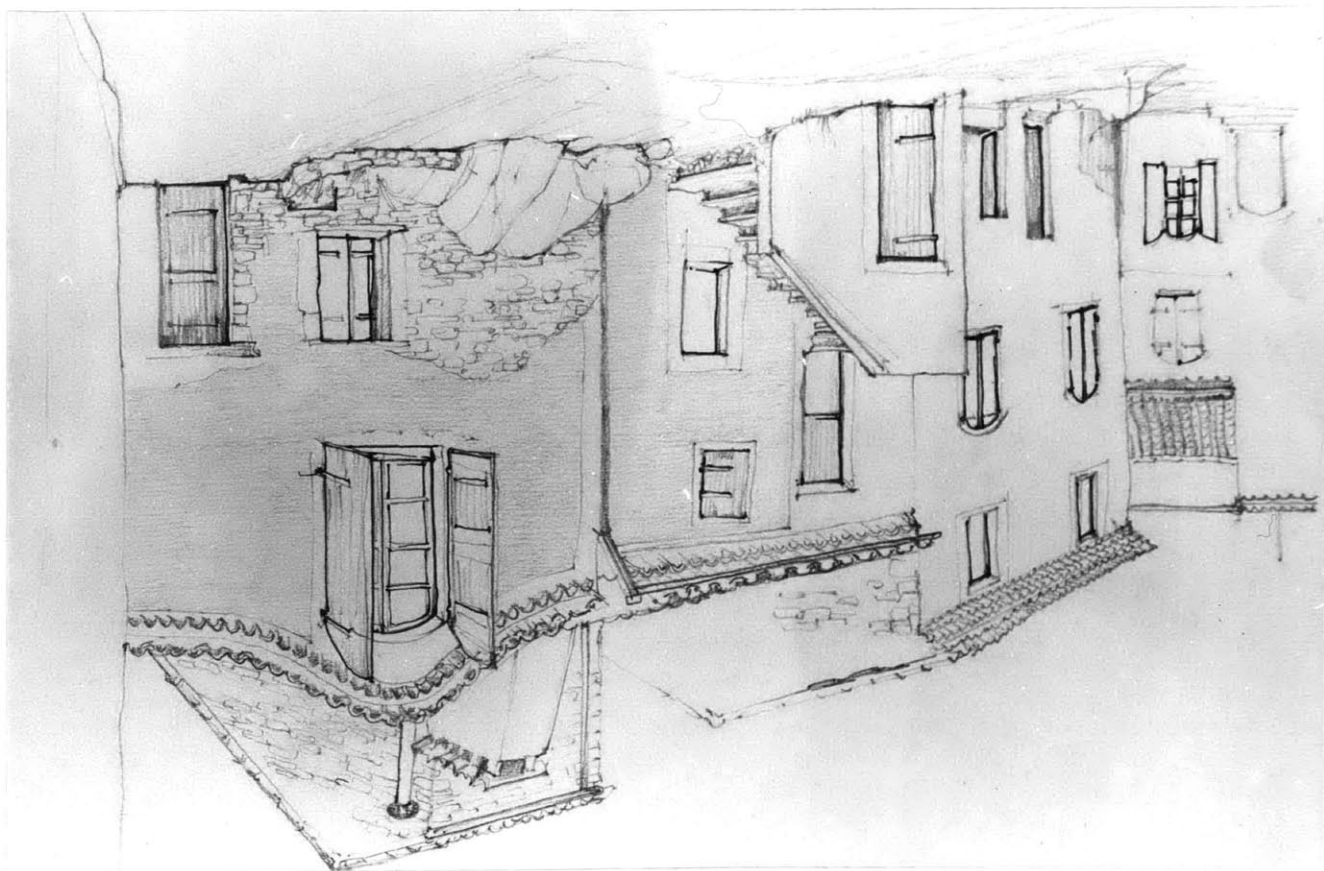
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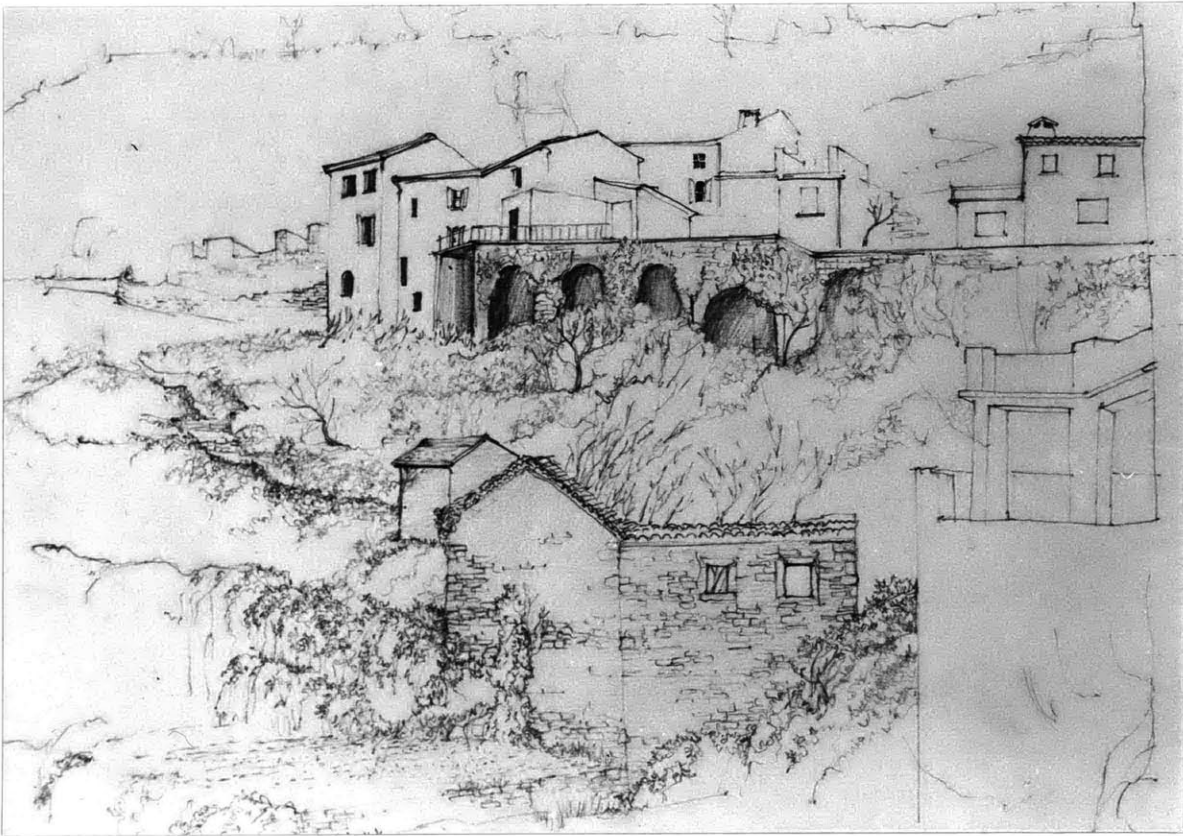


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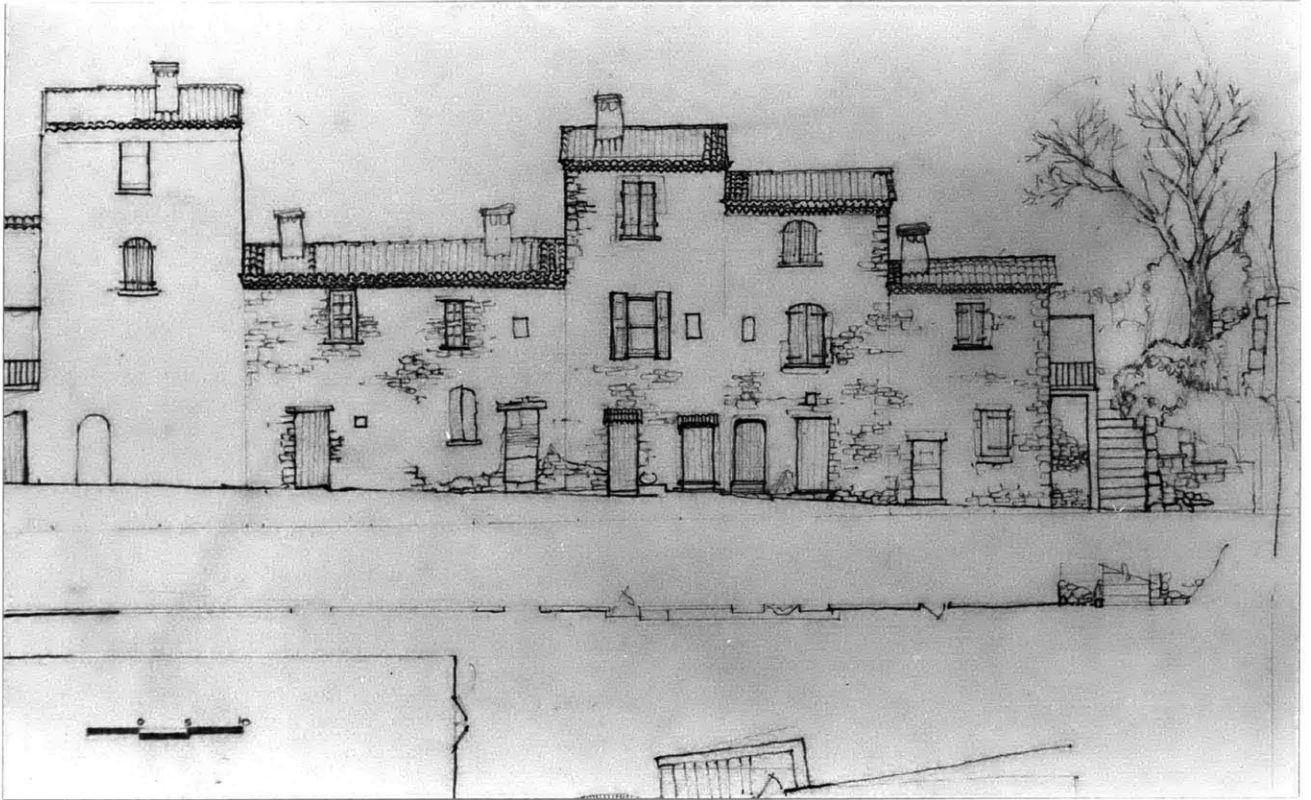


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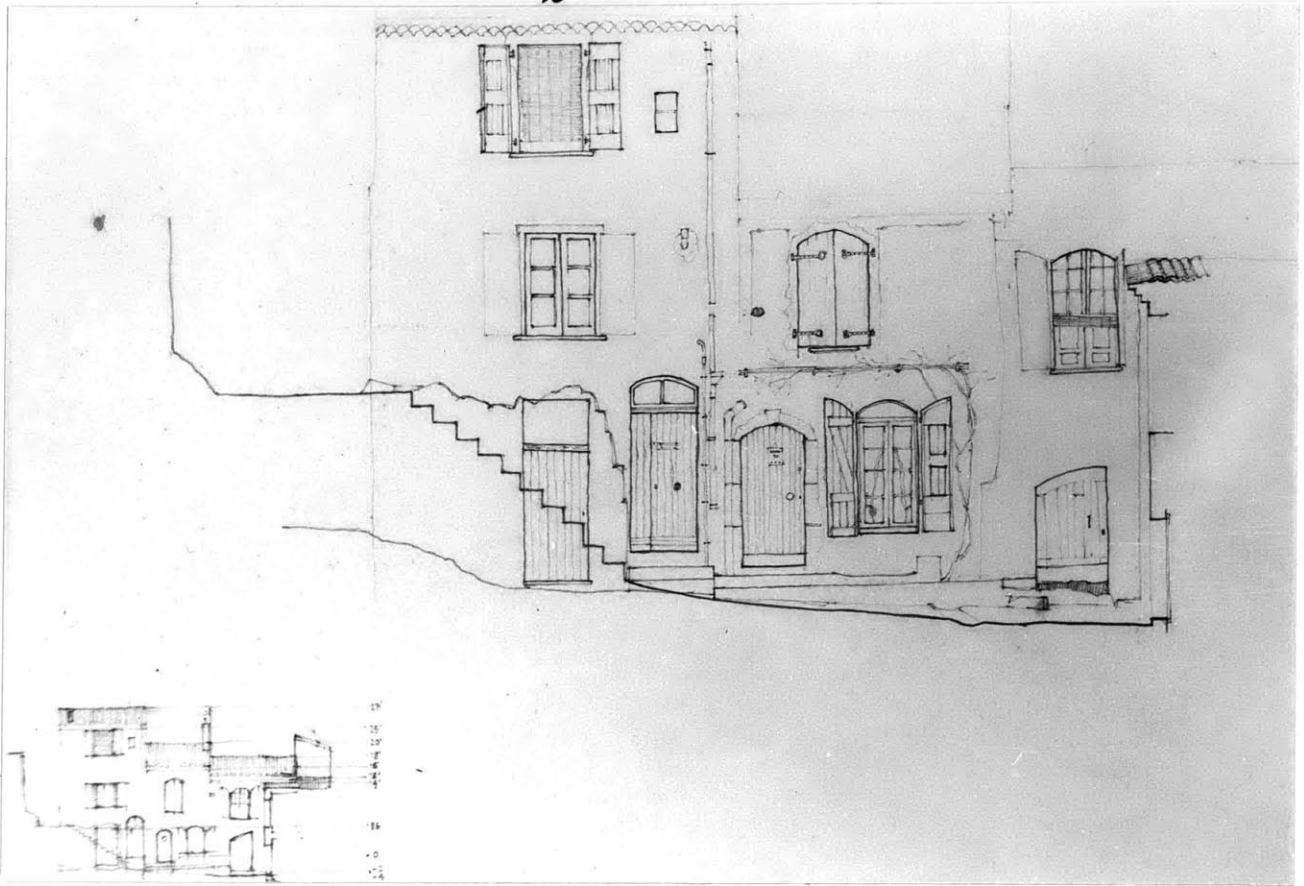




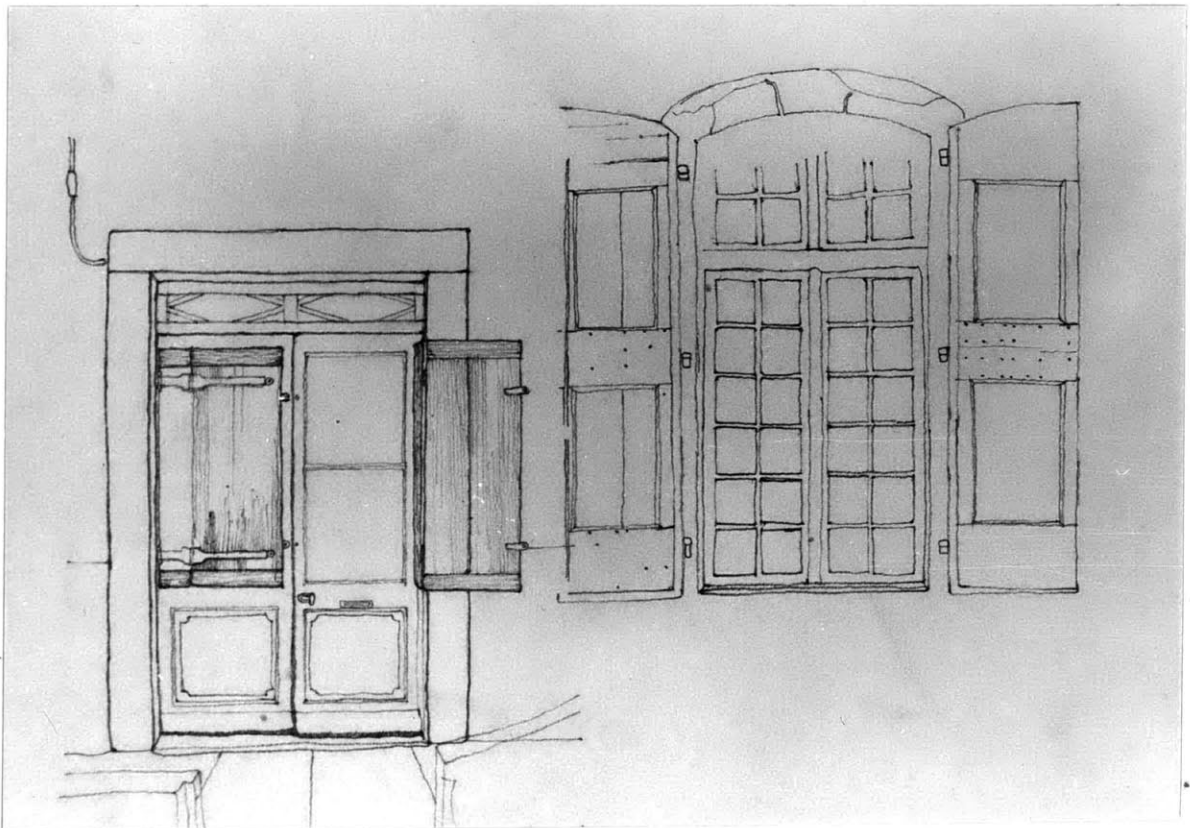


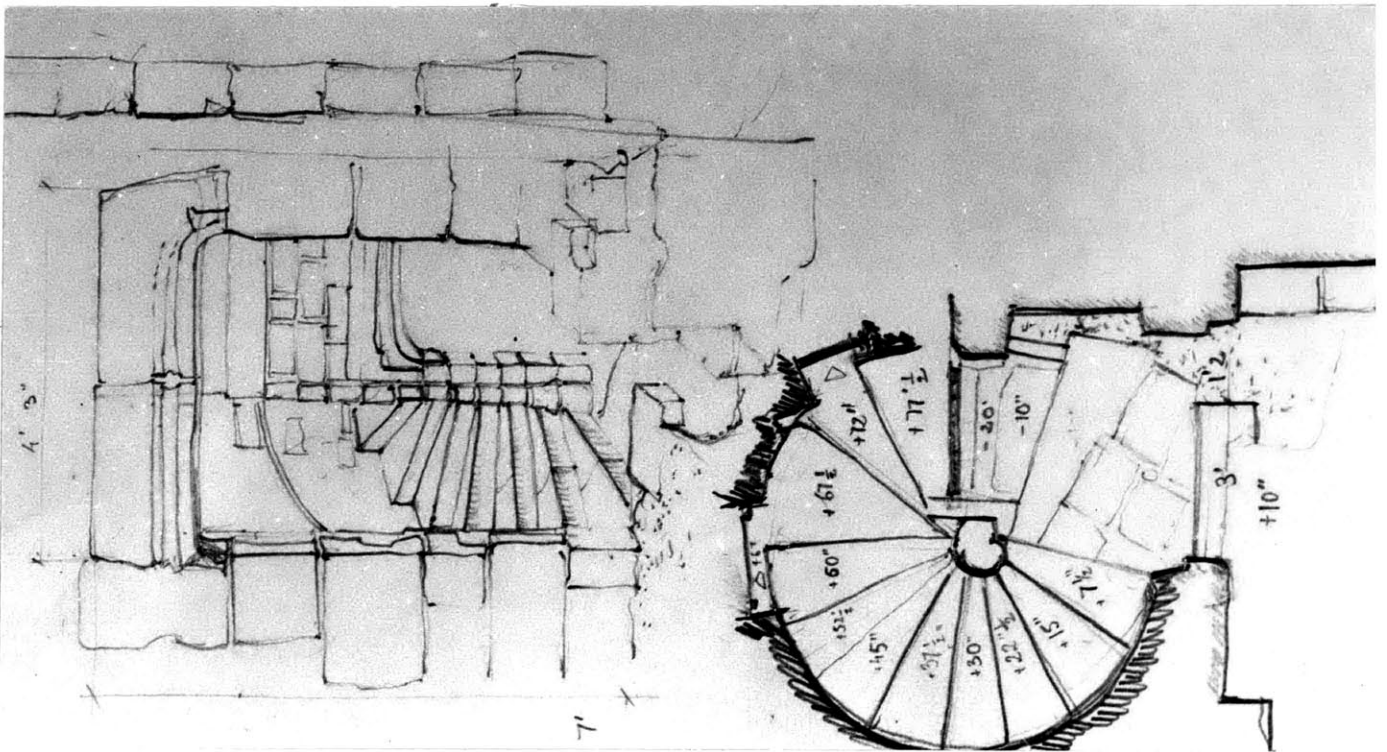
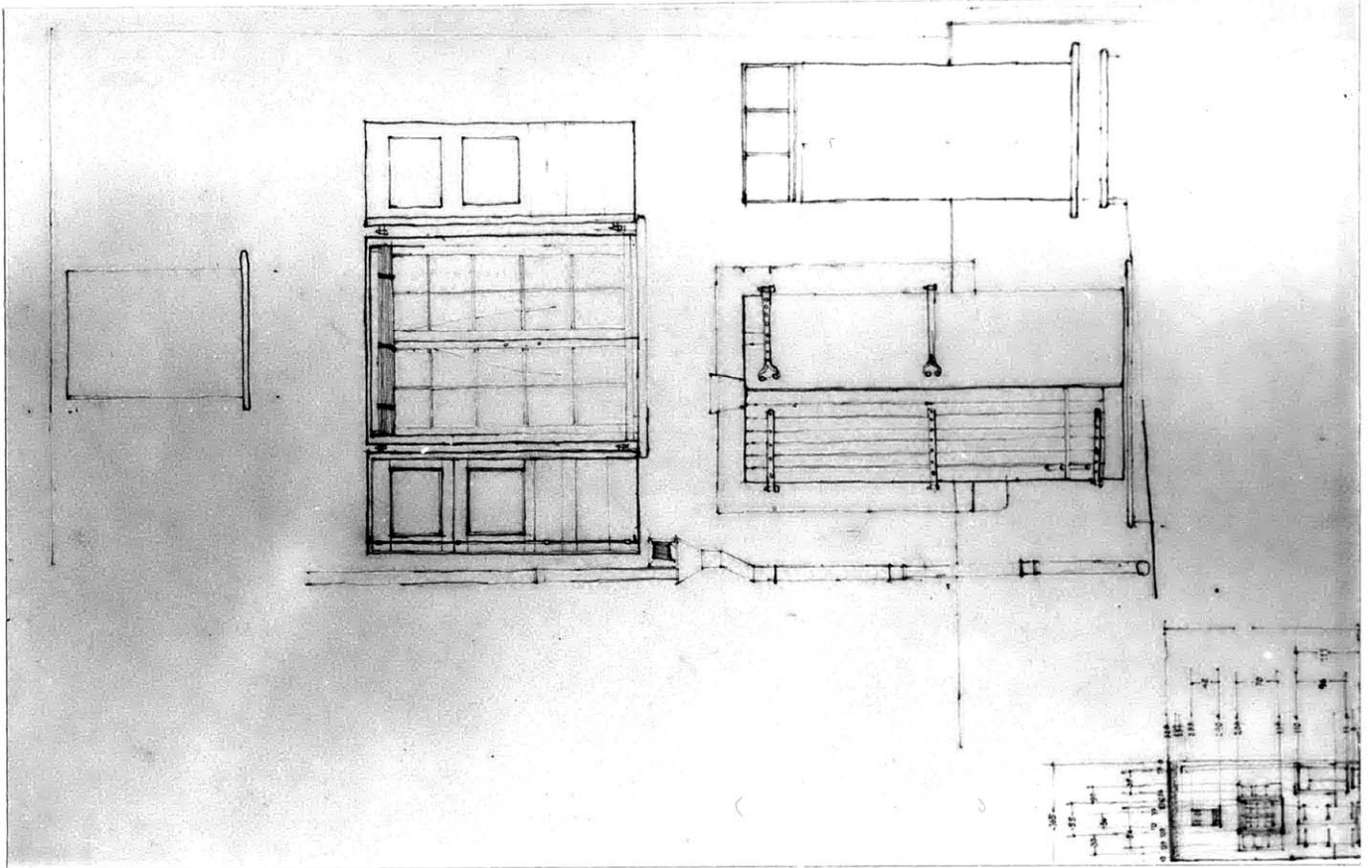
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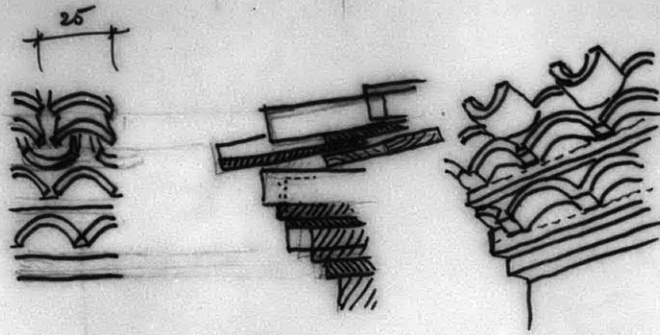
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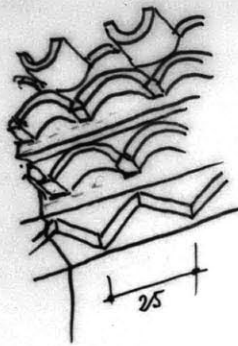
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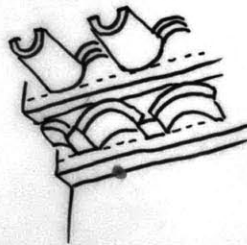




Module courant



variante riche



variante simplifiée

Corniches dites "Pénoises" du Languedoc

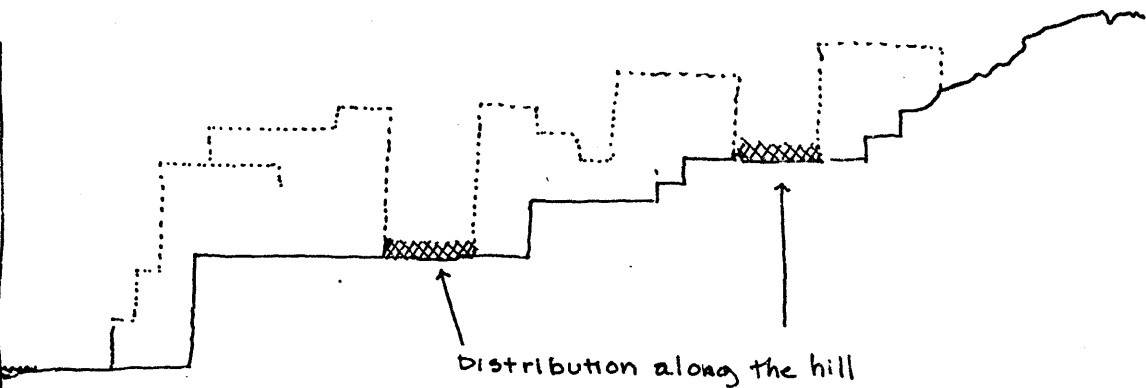
the references are used at 3 scales....

100<sup>th</sup> ~ distribution through the site: major distribution along hill contours

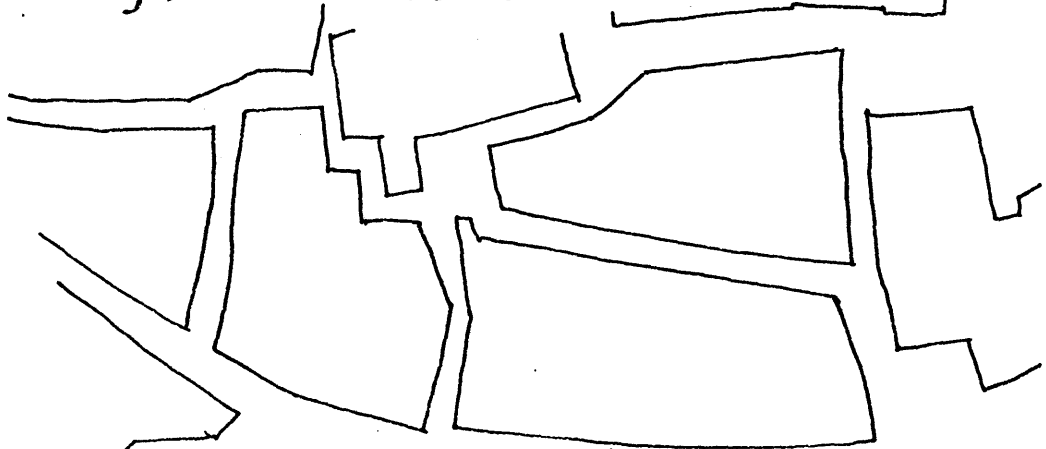
In Sauve, building occurs in the slope, leaving the flat land for agriculture (here, the equivalent could be recreation space)

the concentrations and heights of buildings relates to the distribution which serves them.

SEE REF # 1+2 maps of Sauve

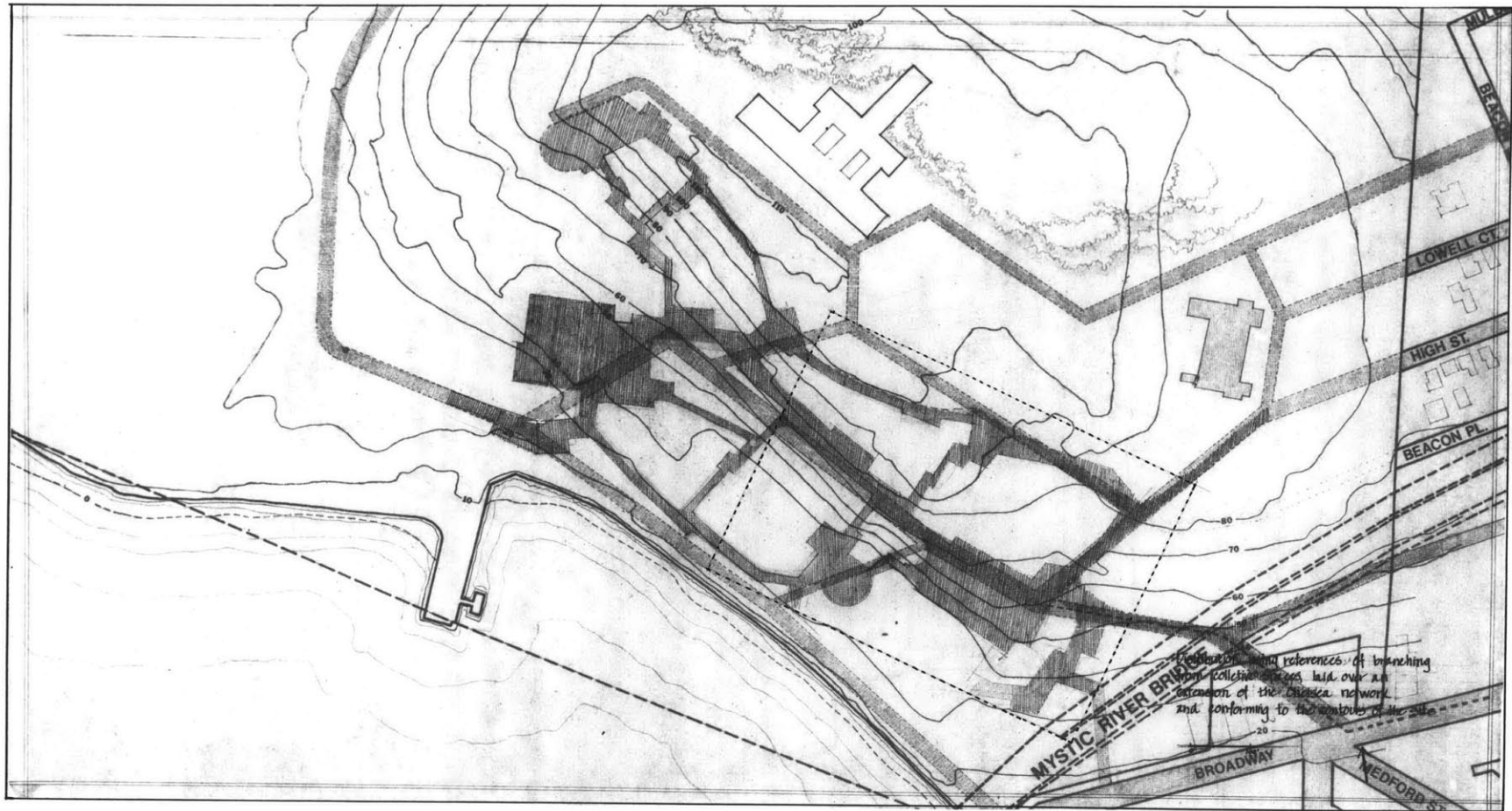


Branching distribution gives the possibility of following the land form closely. It focuses movement towards collective centers/open spaces. Much of the distribution can be local, because it doesn't have to connect directly to the main distribution.



Orientation: In Sauve, the best orientation is one which keeps the sun out (north east.) Here; south is preferable



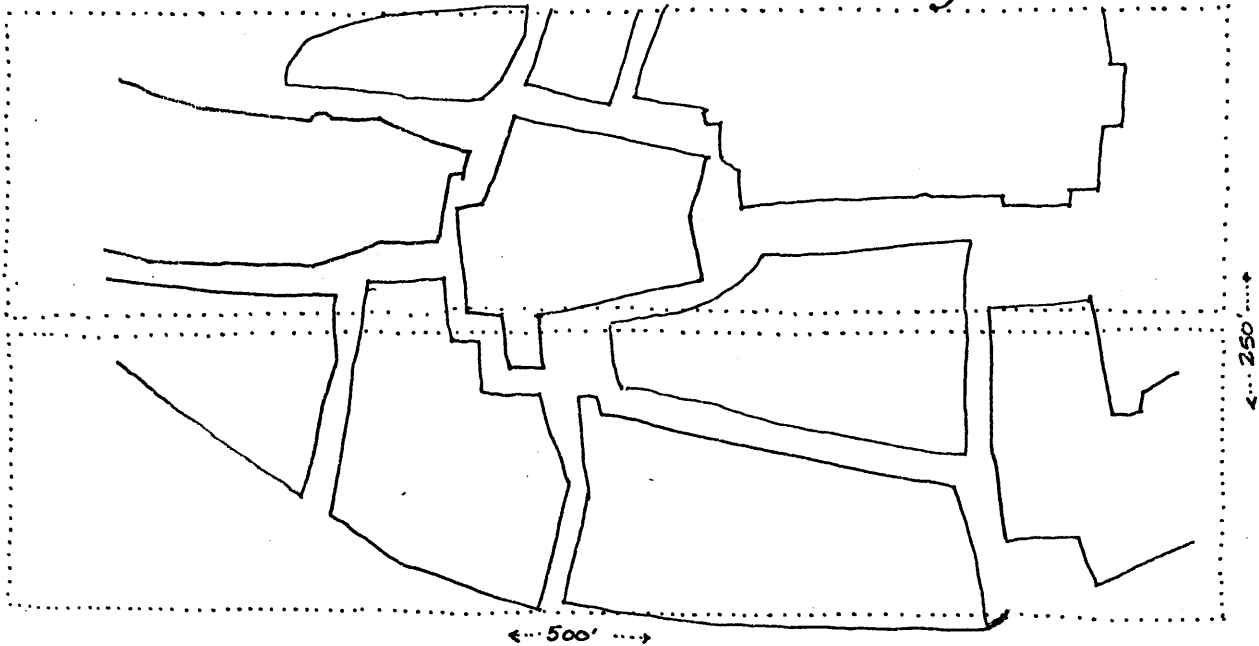


20.

----- section blown up to 40<sup>th</sup> scale

40<sup>th</sup> scale

Comparison between size of a typical block  
in Chelsea and blocks of building in Sauve.



Large collective space and 'wall' are references  
from Sauve (ref # 3, 6)

Green space: where the density of building is  
less (at less active parts of the distribution)  
open space occurs and becomes a continuous  
network. (ref. section # 4)

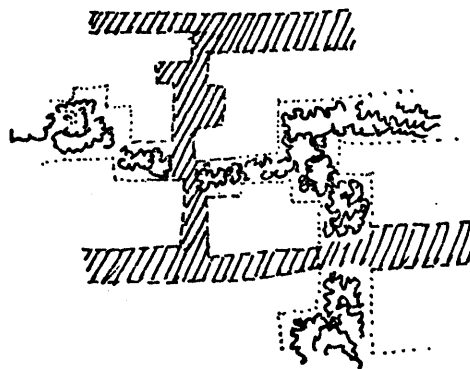




Diagram showing main walls and distribution



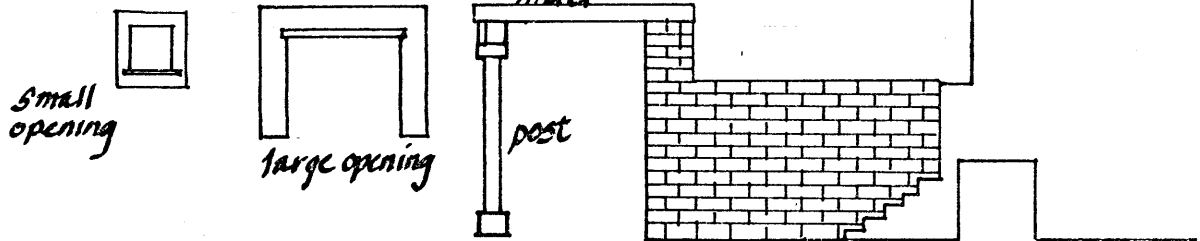


## 10<sup>th</sup> scale

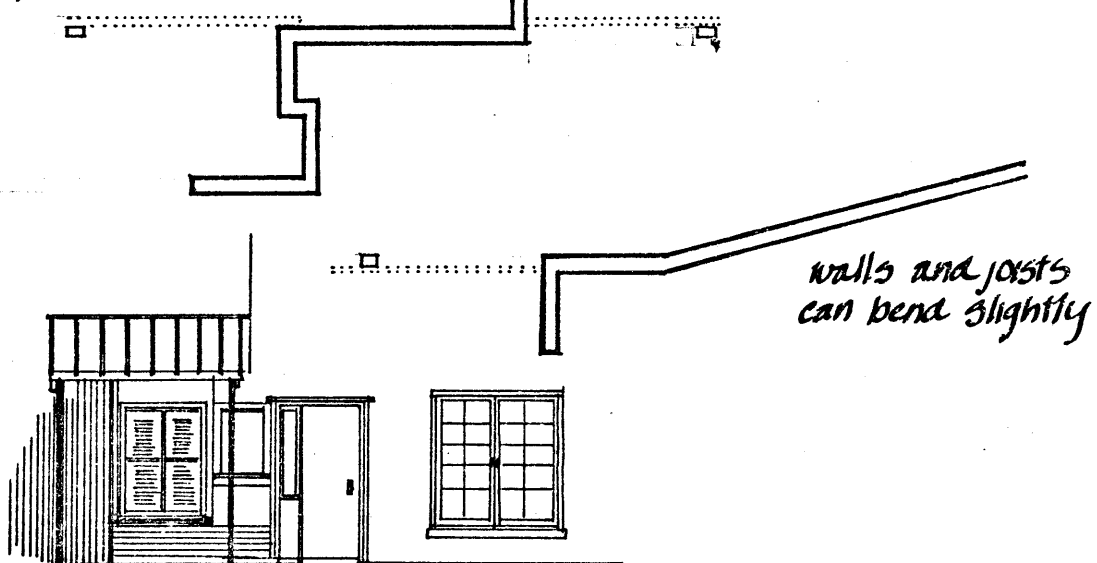
- ref 4,7 → collective vertical distribution is a domestic scale  
 ref 6,7,8 → the arch defines a collective use/space  
 ref 6,13 roofs follow the direction of the main distribution; therefore the hill contours.

## Building System

masonry bearing walls - concrete block and cast pieces



post and beam, wood joists, which make the partial masonry framework habitable



closure by wood screens - doors, windows, stud walls  
 bay windows, balconies

.... ref \* 11, 15, 16



